COMPUTERS IN RAILWAYS IX
International Series on Advances in Transport

Objectives

The objective of this Series is to provide state-of-the-art information on all aspects of transport research and applications. This covers land, water and air systems with emphasis on multi-mode operation. The books in the Series deal with planning operation and management as well as engineering aspects of transport. Environmental topics and sustainability are an important part of the Series. City, national and international transport are covered and encompassing interdisciplinary aspects.

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COMPUTERS IN RAILWAYS IX

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Preface


The objective of the meeting was to discuss the latest advances in the use of computer-based techniques for the management, design, manufacture and operations of railways and the advanced passenger, freight and transit systems.

Since 1987, the meeting has become the world forum for planners, developers, manufacturers and operators to benefit from the latest developments in this important area. The Conference attracted a large number of papers, divided into the following sections:

Planning
Human factors
Computer techniques, management and languages
Electromagnetis compatibility and lightning
Reliability, availability, maintainability and safety (RAMS)
Freight
Advanced train control
Train location
CCTV/communications
Timetable and operations quality
Timetabling
Traffic control
Online scheduling and dispatching
Dynamics and wheel/rail interface
Power supply/catenary
Power supply/energy
Traction and maglev
Obstacle detection/collision analysis

This book is, as usual, distributed throughout the world by WIT Press, the publishing arm of the Wessex Institute of Technology. In addition, together with all other COMPRAIL Conferences held from 1994 onwards, the papers will be displayed in the electronic library of the Transactions of the Wessex Institute, permanently
available to the international scientific community. This is a major development which will further enhance the COMPRAIL meetings.

The Editors are grateful to all the authors for the excellent papers contributed to this book and to those members of the Advisory Committee who participated in the review process.

The Editors
Dresden, 2004
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